

Notice of Allowability

Application No.

09/921,149

Examiner

Suhan Ni

Applicant(s)

BUTTON ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the telephonic interview made 8/4/2005.
2. ☒ The allowed claim(s) is/are 15,17-51,53,54,79,81 and 82.
3. ☒ The drawings filed on 31 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


SUHAN NI
PRIMARY EXAMINER
Suhan Ni
Primary Examiner
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Office Action

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment to amend **claims filed on 11/15/2004** was given in the telephonic interview by Mr. Sung I. Oh on 08/04/2005.
3. The application has been amended as follows:

In the claims:

15. A phasing plug assembly, comprising:

a first phasing plug;

a second phasing plug positioned substantially adjacent to the first phasing plug, both the first and second phasing plugs having a plurality of openings extending through both the first and second phasing plugs[.]; and where the first phasing plug has a rear side and a first intermediate side and the second phasing plug has a second intermediate side and front side and where the first intermediate side of the first phasing plug and the second intermediate side of the second phasing plug are positioned adjacent to one another in the assembly.

22. The assembly of claim [[16]] 15, where the rear side of the first phasing plug is generally spherical in shape.

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23. The assembly of claim [[16]] 15, where the rear side of the first phasing plug is adapted to be positioned adjacent to a diaphragm in a speaker assembly.

30. The assembly of claim [[16]] 15, where the plurality of openings form a compression ratio from about 6:1 to about 12:1 between the rear side of the first phasing plug and the diaphragm.

33. The assembly according to claim [[16]] 15, where the thickness between the rear side and the first intermediate side of the first phasing plug is substantially constant.

38. The assembly of claim [[16]] 15, where the plurality of openings includes a first plurality of openings and a second plurality of openings, where the first plurality of openings extend from the rear side to the first intermediate side of the first phasing plug and the second plurality of openings extends from the second intermediate side to the front side of the second phasing plug, and where the size of the first plurality of openings are substantially similar to the second plurality of openings to provide a continuous transition between the first and second plurality of openings.

47. A phasing plug assembly, comprising:

a first phasing plug made of steel having a plurality of openings through the first phasing plug; and

a second phasing plug having a plurality of openings aligning with the plurality of openings in the first phasing plug when the second phasing plug is placed adjacent to the first phasing plug[.], where the first phasing plug has a rear side and a first intermediate side and the second phasing plug has a second intermediate side and front side and where the first

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intermediate side of the first phasing plug and the second intermediate side of the second phasing plug are positioned adjacent to one another in the assembly.

81. The assembly according to claim ~~[[80]]~~ 79, where the rear side of the first phasing plug is domed shaped.

82. The assembly according to claim ~~[[80]]~~ 79, where the first and second phasing plugs are made of different materials.

Please Cancel claims 16, 52, 55-78 and 80.

(End of Examiner's Amendment)


SUHAN N
PRIMARY EXAMINER